

Central Data Exchange Overview



Topics

- What is CDX?
- Benefits
- Who is using CDX?
- Building data flows for CDX



What is CDX?

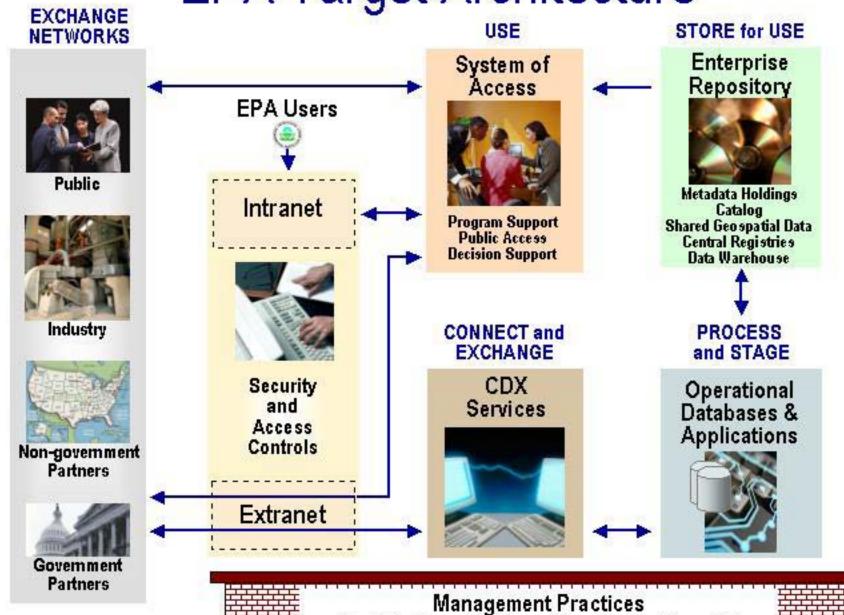
- Portal through which environmental data enters the Agency
- EPA's Node on a State and tribal network for exchanging environmental data



What Functions does CDX Provide?

- Receive
- Authenticate
- Translate
- Detect Errors
- Archive
- Distribute
- Support Customers

EPA Target Architecture



(Architecture, Policies, Standards, Security)

Overview of CDX Functions and Options

Submit Web Form

PC & Internet Browser



Register & Support Users

- Registers individual users
- Provides multiple ways to register
- Supports users through a help desk
- Houses documentation



Archive Data

- Receives official copy
- Supports additional archives as needed
- Includes log of transaction





Validate

Translate or Edit

Distribute



Submit XML or Flat-File

Accept Variety of Formats

- Provides access to EPA National Environmental Information Node
- Enables user to "push" files or CDX can "pull" through Active Data Retrieval
- Provides receipt
- Scans for viruses

Confirm Origin of Submission (optional)

- Supports Access
 Certificates for
 Electronic
 Submissions (ACES)
 program
- Uses digital signature
- Provides PIN/ Password

Translate and/or Edit Data (optional)

- Converts format (e.g XML> Flat-file)
- Performs simple or complex edit checks on files
- Creates multiple/ different copies
- Provides copies of record to submitter

Distribute Data to Target Systems

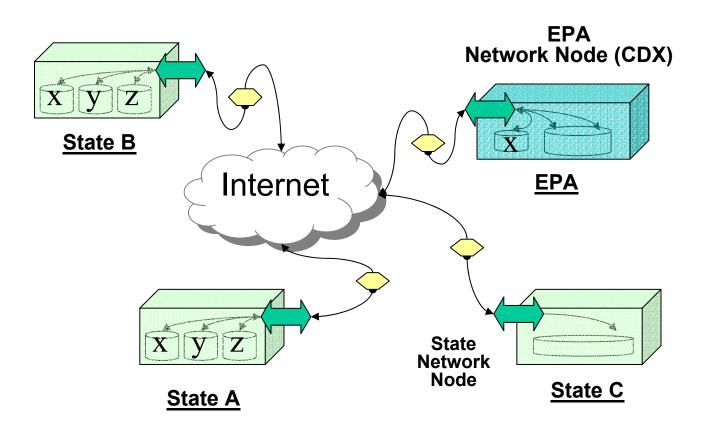
- Uses "push" or "pull" technologies
- Provides a variety of connections (e.g., Virtual Private Network)
- Sends return messages and error notifications to users at several points







CDX and the Exchange Network



- Agency Network Node
- Data Exchange Template



User Benefits of CDX

- Responds to Industry/state/program desires for a common point of exchange with EPA
- Provides common registration process for industry
- Provides standard interface and formats for users
- Pre-populates existing CDX data
- Integrates receipt, security, translation, archiving and distribution functions
- Maintains centralized customer support



EPA Benefits of CDX

- Addresses mandates under GPEA
- Provides infrastructure service to programs
- Administers core EPA data exchange functions centrally
- Provides reduced costs by sharing resources
- Eliminates data entry tasks
- Promotes higher quality data
- Sets the legal framework for electronic submissions



CDX Security

- CDX Infrastructure
 - Secure Sockets Layer
 - Virtual Private Network
- Submitter Identification
 - User name and password for everyone
 - Digital Certificate
 - Pin and password
 - Print, sign, mail



CDX Data Flows

In Production

- AQS File Transfers
- Permit Compliance System (PCS/IDEF)
- Facility Registry System (FRS)
- National Emission Inventory (NEI)
- Toxics Release Inventory (TRI)
- Unregulated Contaminant Monitoring Rule (UCMR)
- Toxic Substances Control Act Test Submissions (TSCATS)
- RCRA Site ID Form
- RCRA State File Transfers

Under Development

- STOrage and RETrieval System (STORET)
- AIR Quality System (AQS)
- Radionuclide NESHAPS
- Lead Notifications



Further Information on CDX and the Exchange Network

www.epa.gov/cdx www.exchangenetwork.net www.ecos.org